Installing cpd3 and setting up access to your station data (updated 2019-08-09)

Installing cpd3

The installer for cpd3 is on our ftp site at:
ftp://aftp.cmdl.noaa.gov/aerosol/software/cpd3/
There are multiple directories there (including osx, win32 and win64).

→**Windows computers**
If you have a windows computer, go into the directory that matches your computer's cpu size (either win32 or win 64).

Download the file **cpd3-v#.msi** . This file is the cpd3 installer. (The # represents the most recent version – i.e., the highest number; last time I looked (oct 9, 2016) it was cpd3-v5.msi.)

Run **cpd3-v#.msi** on your computer in order to install it. It's just like installing any piece of software. It will walk you through a few screens. Note: the second screen requires you to check a box to accept.

On the last screen there will be another checkbox for 'Run cpd3 set-up'. It should be checked – but if it isn't then please check it and choose 'finish'.

→**Linux computers (Ubuntu 18.04.02 LTS, 64-bit version)**
CPD3 is supported fully on only a few Linux distributions. This document describes the procedure for installing on the current long-term supported (LTS) version of Ubuntu, version 18.04.02. The installation media and installation instructions can be downloaded from https://help.ubuntu.com/lts/installation-guide/index.html.

When you have booted your Linux system, open a terminal command window and run the following four commands (each command should be typed as one continuous line):

```
sudo wget -O - \
     ftp://aftp.cmdl.noaa.gov/aerosol/software/aerosol.key \
     | apt-key add -
sudo wget -O - \
     ftp://aftp.cmdl.noaa.gov/aerosol/software/cpd3/debian/cpd3-
     ubuntu18.list \
     > /etc/apt/sources.list.d/cpd3.list
sudo apt update
sudo apt install cpd3
```

Configure CPD3 for your station by opening a terminal window and typing "cpd3.setup". Follow the prompts as described below.

Setting up access to your station data
You'll now come to a screen where there's (currently) only one option: "synchronized data editing". Select that option!

That will bring up a screen that asks for your name and email. Once those are filled out you'll be asked for your three letter station code (xxx →xxx is the three letter station ID used in the NOAA network). This will send an email request to Derek to approve your access to your station {XXX} data. A window will pop-up saying your access request has been submitted.

Within a day you will get an email from Derek saying that the request has been granted. (Basically this is done to ensure no one can access your data through NOAA w/o your permission). Note: this access request will need to happen on each computer on which you install cpd3 – each computer will get a unique encryption key allowing it access to a specific station's data. If you had a second station (i.e., something set up in your lab) you'd need another 3 letter ID for that station and would do a separate data access request for synchronizing that data.

Once you've been granted access you can initiate data synchronization. Note: you'll need to wait until the day after you get the access email to do the initial synchronization because of the way things are set up.

Synchronizing data
Start cpd3 by double-clicking on the cpd3 icon on your desktop (can also access cpd3 through your programs directory). The first time you start cpd3 this will bring up a blank cpd3 window because no data have been synchronized yet. At the top of the cpd3 window are some pull-down menu options. Choose the 'Operations' menu and under that chose 'Synchronize data'. The first time you do this it will take a while because it is pulling all the station data from NOAA to your laptop and then unpacking it so it is available for cpd3. When we did it here it took ~5min to do 1 year of data for a smalls tation (aeth+neph), but speed will vary a bit with your download speed and computer speed and number of instruments.

Now, you can view and edit the data.   To see data you just need to change the date range in the text bar to the desired date range. Note: the date range default format is 'year and day of year (DOY)', but you can change that to 'yyyy-mm-dd') date format by going to the 'edit' pulldown menu and choosing preferences and then choosing the 'Date and Time' option.

Note on operation/synchronization – this option does two things:
 (1) Pulls data over to your laptop so you can view/edit it. .
 (2) Sends your data editing directives back to us as well as a flag telling us if any data have been passed. This provides a backup of your editing as well as allowing us to help advise on editing (super useful when you start using the software).